describes as "the most unfavourable conditions." My experience is admittedly confined to cases treated outside the zone of active warfare. I venture to suggest, nevertheless, that, however unfavourable the conditions at Tobruk might be from the standpoint of psychotherapy, they were conspicuously favourable from the standpoint of morale; and this consideration seems to me to support my general conclusion that the problem presented by the war neuroses is one of morale rather than one of psychotherapy. No results are of the slightest significance, of course, unless assessed in the light of a long-term (as against an immediate) follow-up, and it is only in the light of such a follow-up that the results obtained at the Seale Hayne Military Hospital during the last war by means of "simple psychotherapy in the form of explanation, persuasion, and re-education" can possibly be assessed.

Long-term results aside, however, I cannot refrain from raising the question whether such "simple psychotherapy" is really psychotherapy at all. Nothing that Sir Arthur has said convinces me that I was greatly in error when I felt driven to remark: "What these people need is not a psychotherapist but an evangelist." During the last war scientific psychotherapy had as yet barely emerged, but I fancy that in those days the evangelist had an easier task than he has now after twenty-odd years of complacency and disillusionment. I fancy, also, that it was easier to become an evangelist then.—I am, etc.,

Edinburgh. W. RONALD D. FAIRBAIRN.

Pleurisy and Pleural Effusion

SIR,—In the recent correspondence in the *Journal* on the above subject I see no mention of the subcutaneous tuberculin test, which I have been using with satisfactory results for the past 30 years. I begin with old tuberculin human (T) 0.0002 c.cm. If no reaction follows the dose is doubled again and again up to 6 doses, when the case is pronounced negative. If a distinct reaction follows any particular dose, the test doses are stopped, and the patient is advised to have sanatorium or a course of tuberculin treatment. The test doses are given once or twice a week according to convenience. I find that over 40% of these cases do not react to test doses, and can be set aside as non-tuberculous. This is a much larger proportion than could be rejected by von Pirquet or the intradermal tests.—I am, etc.,

Belfast. JOHN R. GILLESPIE.

Bagassosis

SIR,—The article by Drs. L. I. M. Castleden and J. L. Hamilton-Paterson on bagassosis (Oct. 24, 1942, p. 478) should stimulate interest in the occurrence of respiratory disorders among workers in sugar-cane factories in the Caribbean area. It is remarkable that these disorders have escaped notice up to the present..

During the grinding season air in a cane factory is filled with megass dust (or, as the authors term it, "bagasse" dust), and it is diffused throughout the surrounding air for a considerable distance, hence workers in the factory and people living in the neighbourhood inhale considerable quantities. Somewhat similar conditions are found in rice mills. Having noted that a considerable number of patients suffering from respiratory disorders, especially asthma, who had been referred to me for allergic tests worked in cane or rice mills, extracts of megass and of padi dust were made by Coca's method and the skin reactions of such patients tested by intradermal injection of 0.02 c.cm. Patients who worked in cane factories gave a positive reaction to the megass extract, and those in rice mills to the padi extract.

Early cases obtained relief and sometimes cure by avoiding the offending dust, but as this meant obtaining employment elsewhere, often at lower wages, they tended to return to their former employment, with consequent recurrence of symptoms. Treatment by desensitization with the appropriate extract was quite effective in the early cases, but old-standing cases complicated by chronic bronchitis and emphysema were less amenable to treatment. The latter were helped by small desensitizing doses of vaccines as recommended by Coke and Coke, followed by desensitization to the specific allergen. It would appear, therefore, that these disorders are, as the authors of the paper observed, the result of an allergic reaction. Not having had an opportunity to investigate these conditions in the factory, I am unaware to what extent workers in these industries are affected, but conversations with patients gave me the impression that it is not inconsiderable. The occurrence of respiratory disorders among workers in these industries requires investigation in all sugar- and rice-producing countries in order that methods for prevention may be devised.—I am, etc.,

P. A. CLEARKIN,
Georgetown, Demerara. Govt. Bacteriologist.

Eventration of the Diaphragm

SIR,—With reference to the article by Dr. A. J. E. Mills (Jan. 23, p. 97) under the above heading, there is not sufficient detail to make an exact diagnosis, but it would appear to be similar to that first described by Roemheld and also by Bergmann and Herz. The gastro-cardiac symptom complex first described by Roemheld is another cause for pains in the region of the heart. Gastro-intestinal disturbances result in an upward displacement of the dome of the left diaphragm, and this in turn causes displacement of the heart and larger blood vessels. In such cases there is always a large amount of air in the stomach or the large intestine, especially the left colonic flexure. Patients do not complain much so long as the stomach is empty. This explains, in the case described by Dr. Mills, the inability of the patient to play games for three or four hours after a meal. If he had tried to play games immediately after a meal he would, in all probability, have felt a pain in the heart area, back of the lower end of the sternum, and in the left shoulder. There is no mention of this patient's chest or abdominal measurements or details about his weight. In all probability he had put on some weight, and was also a mouth breather and was therefore unable to breathe deeply. No mention is made of blood pressure or blood-pressure curves in response to exertion; glycosuria is often seen in these cases, possibly due to diminished blood supply to the pancreas; there may have been anacidity, subacidity, fermentative dyspepsia, colitis, or aerophagia; avitaminosis B_1 is common. There is probably an atrophic condition of the diaphragm and often loss of tone in the abdominal muscles as well as inverted breathing. The hiccup is easy to account for and is caused mechanically. The vagus nerve runs through the narrow slit on either side of the hiatus oesophageus. In normal subjects there is ample room for the diaphragm to move up and down, but in old age or as a result of accumulation of gas in the abdomen the hiatus may be enlarged and become lax enough to have either some of the stomach pushed up or the oesophagus pulled down to form a kind of hernia causing irritation of the vagus. This would explain the disappearance of the hiccup when lying down.

This condition is fully described by Bergmann under the heading "epiphrenal syndrome." He carried out many experiments on animals by putting rubber balloons through the oesophageal hiatus and then filling them with air to stimulate the vagus in order to get the effect. These hernias have been demonstrated by *x* rays in 300 cases by Knothe at the Bergmann Clinic. There is also the work of Herz (*Die Sexuelle Psychogene Herzneurose*, Vienna, 1909) on phrenocardia connecting some of these cases up with psychogenic sexual neurosis. He substitutes the word "dyspnoea" for "respiratory block" in order to make a differential diagnosis between the neurosis connected with the diaphragm rather than from the lungs. His work was confirmed by Erb and others.

The position occupied during sleep is very helpful in making a differential diagnosis. Most of the patients sleep on the left side, whereas subjects of organic heart diseases usually sleep on the right. These patients also have hearts that are too small for their bodies and are subject to extrasystoles on sudden change of position. Only recently I saw a patient, aged 23 and home on seven days' leave from the Army, who complained of his heart: feeling of fullness and pain in the region of the heart, difficulty in breathing, nausea, and general feeling of anxiety. On examination (standing) the stomach was distended and there appeared to be a large amount of gas under the left side of the diaphragm. On examining him lying down I noticed the position of his apex beat moved upwards and outwards, and he was most uncomfortable, so much so that I decided to siphon off the air and gave him immediate relief.

These patients are often subjected to attacks of intercostal neuralgia, and one can see small capillary varicosities over the left costal arch, the supraclavicular fossae are frequently seen to bulge, and, according to Roemheld, there is often a deficiency of gastric secretion, and toxins are liable to be absorbed and injure the myocardium by visceral reflex effect.—I am, etc.,

London, W.1. J. E. O'LOGHLEN.

Staffing of Miniature Mass Radiography Units

SIR,—The machines for the examination of the civilian population have been designed for the express purpose of radiographing men and women at the rate of 5,000 a week or 250,000 a year. Naturally it will take time and organization to ensure that each unit will be fed to capacity and at a uniform rate.

The unit may be found to be easy to take to pieces and to reassemble, but difficult to transport from one centre to another, and the best choice of site for its operation may be found only by trial and error. It seems that in the larger towns the first group of machines is likely to be static, and should therefore be erected in a convenient site, where large numbers of the population pass or congregate. The need for adequate dressing-room accommodation has been stressed by Dr. Henderson (Jan. 16, p. 81), and heating and cloakroom attendance should not be overlooked. Sites that automatically suggest themselves might be the London railway termini, the larger stores, or air-raid shelters accommodating some thousands of persons. Such sites might appeal more to the man in the street than, say, the out-patient department of a large hospital.

The method of stamping the identity card, practised abroad, would seem a convenient one to remind the owner of the date when re-examination should be carried out, and to enable the patient's doctor to obtain any information he may require regarding the examination.

It will be found that each machine will be capable of taking a considerably larger number of miniature films than any small group of medical men is able to interpret, and it will be found necesary to make provision for the interpretation of a large surplus of miniature films. It makes little difference whether such interpretation is carried out by physicians or radiologists so long as it is accurate, and I think Dr. Henderson's suggestion that each series of films should be examined by two observers is a wise one, and would suggest that the reports should be made independently and should be correlated by a third observer. It is understood, of course, that every suspected abnormal finding would be checked by routine radiography prior to a clinical examination. Personally I feel that many interpreters would be willing to carry out, say, 500 interpretations per week in their own hospitals or homes provided they were kept informed of the results of the subsequent findings.

The success of the scheme will depend largely on the co-operation of the public, who will need to be informed by the Ministry of Health of its object through the cinema and Press.—I am, etc.,

London, S.W.3. J. V. SPARKS.

Trichlorethylene Anaesthesia

SIR,—Trilene has recently been accused of having two faults: first, that it is liable to be decomposed into phosgene by the heat of the diathermy apparatus; and, secondly, that it may cause auricular fibrillation.

As regards the formation of phosgene, this is no more likely to happen with trilene than with chloroform. In spite of the fact that chloroform is freely used in the presence of fires, flames, and sparks the references in the literature to phosgene formation are rare. Phosgene causes lacrimation and coughing in half the concentration required to do any harm. Lukis describes a case in which coughing and lacrimation were caused by the use of open chloroform in a small room where there was a coal fire and gas jets. The symptoms quickly subsided when the window was opened.

As regards auricular fibrillation, I had a case this morning of a healthy young woman who was being anaesthetized with N_2O 70% + O_2 30% and trilene for dissection of her tonsils. After blind nasal intubation the pulse was normal in rhythm and rate, but 5 minutes later it became faster and grossly irregular. At that time anaesthesia was deeper than necessary (plane 3). Anaesthesia was lightened to plane 2, and 10 minutes later the pulse returned to its normal rate (80 per minute) and rhythm. Anaesthesia was continued for another 15 minutes with the same agents without further incident. There was no cyanosis.

Transient alterations in the heart's action are found to occur not very uncommonly during all kinds of inhalation anaesthesia if they are watched for sufficiently carefully, and not enough data have been gathered to enable a decision to be made as to whether or not trilene is a worse offender in this respect than ether.—I am, etc.,

Colchester. DOUGLAS CLENDON.

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Little Audrey and the Doc

SIR,—Little Audrey had a friend called Emma, who awoke one bright post-war morning with a very bad cold. Her mother, who knew all the answers, said she was to get out of her nice warm bed at once, dress herself, and come to the Health Centre. Emma tried crying, but it didn't work, so she got out of bed and shivered, and presently shivered still more in the rain at the bus stop. She got her own back by coughing all over everyone in the bus, which was very full, because a lot of other people with impetigo, sprained wrists, scabies, rheumatic fever, and what-have-you were going to the Health Centre too. When they got there Emma and her mother sat in a beautiful big waiting-room for hours and hours, while her mother wondered what to do about the shopping and the washing, and got crosser and crosser. Emma just went on coughing and wheezing, till, by-and-by, a man in a white coat said they couldn't see Dr. Smith because it wasn't his day, so Emma just yelled and said she wouldn't see anyone else, and the man said she was a very naughty girl and took her into a room where he examined her very carefully and wrote out a lot of forms in duplicate. Then they had to wait again, because Emma was to have her chest *x*-rayed and her sputum typed and her blood count done. So they had a bun instead of dinner, and Emma went on shivering and got red in the face and sweated, and Emma's mother got crosser and crosser, and Emma cried again, till, about tea-time, another man in a white coat said it was all right: Emma had pneumonia and must go to hospital, and that the ambulance would be along soon.

It turned out to be a very interesting case, because Emma got an empyema, and had all sorts of operations and tests and had ever so many notes and reports all in duplicate, except for some that were in triplicate, and she went to a lovely convalescent home; and her mother was able to get on with the washing and the shopping without a coughing child in the house.

Little Audrey (she was Emma's friend, you remember) woke up with a wheezy cold, too; but her mother was old-fashioned and just rang up Dr. Brown, who had brought little Audrey into the world and knew her colds of old. Dr. Brown came round, and opened the windows and felt the hot-water bottle. Then he tickled little Audrey, who loved him and called him doc-doc, which was most unscientific, till little Audrey laughed and laughed and laughed. She laughed so much that she laughed all the germs out of her chest and got well the next day, which was all very dull, because no one did anything really clever or wrote up any notes in duplicate.—I am, etc.,

Ashtead, Surrey. W. EDWARDS.

I. L. Hamilton-Paterson and L. I. M. Castleden (*Brit. Heart J.*, 1942, **4**, 103) record three cases of intracardiac tumour—namely, a sarcoma of the right auricle in a woman aged 45, a pseudo-myxoma of the left auricle in a man aged 46, and an aneurysm in a man aged 27, which in life produced signs and symptoms attributable to Ayerza's syndrome, mitral stenosis, and pulmonary stenosis respectively. The following classification of heart tumours is suggested: (1) benign tumours due to organization of blood clot—pseudo-myxomata; (2) malignant tumours arising from the mesenchymal elements of the heart wall; and (3) benign congenital tumour.